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21552 7590 12/03/2009

AUSTIN RAPP & HARDMAN
170 South Main Street, Suite 735
SALT LAKE CITY, UT 84101

EXAMINER	
MARCETICH, ADAM M	
ART UNIT	PAPER NUMBER
3761	

DATE MAILED: 12/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,708	07/27/2007	Heping Huang	3557.2.123	3051

TITLE OF INVENTION: PLASMA LIPIDS IN-VITRO FILTERING METHOD AND APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$300	$0	$1055	03/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

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If the SMALL ENTITY is shown as NO:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,708	07/27/2007	Heping Huang	3557.2.123	3051

TITLE OF INVENTION: PLASMA LIPIDS IN-VITRO FILTERING METHOD AND APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	$755	$300	$0	$1055	03/03/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
MARCETICH, ADAM M	3761	604-005030

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:

❑ Issue Fee

❑ Publication Fee (No small entity discount permitted)

❑ Advance Order - # of Copies _____

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❑ A check is enclosed.

❑ Payment by credit card. Form PTO-2038 is attached.

❑ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)

❑ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

❑ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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EXAMINER	
MARCETICH, ADAM M	
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3761	

DATE MAILED: 12/03/2009

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Notice of Allowability	Application No.	Applicant(s)	
	10/599,708	HUANG ET AL.	
	Examiner	Art Unit	
	Adam Marcetich	3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *09 September 2009*.

2. ☒ The allowed claim(s) is/are *1-5,9 and 11-16*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Adam Marcetich/ Examiner, Art Unit 3761	/Leslie Deak/ Primary Examiner, AU 3761

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). A certified copy of parent Application No. China 200420021636.6, filed on 06 April 2004 has been received.

Claim Interpretation

2. Examiner finds an enabling description of amended claims 1 and 9 in the specification, describing the claimed first, second and third films (¶ [0012], [0018], [0028]):

Layer	Pore size (microns)	Material	Function
Second	0.3		Filters bacteria and chyle-lipoprotein
First	0.3 – 0.65	Silicon oxide and optional multiple layers	Filters lipids
Third	0.2	Nylon	Filters foreign particles

Response to Arguments

3. Applicant's arguments, see p. 7-17 filed 04 September 2009 with respect to the rejection(s) of claim(s) 1-9, 11-16, and 18-19 under 35 USC § 103 over Bomberger '809, Bomberger '776, Matkovich, Foltz, Jacobsen and Papillon have been fully considered and are persuasive. Therefore, the rejection is withdrawn.

Allowable Claims

4. Claims 1-5, 9 and 11-16 are allowed over the prior art of record.

Reasons For Allowance

5. The following is an examiner's statement of reasons for allowance:

6. The closest prior art of record, Bomberger '809 et al. (US 20030150809) discloses an in-vitro blood plasma lipids filtering method and apparatus (¶ [0025], [0055], [0086], [0093]), comprising:

7. collecting blood from a patient by a blood collecting device (¶ [0108], Fig. 2, fluid source 28 including apheresis system);

8. separating blood plasma from the collected blood by a blood separating device connected to the blood collecting device (¶ [0093], [0114] and Fig. 2, centrifuge 86 separating blood plasma);

9. controlling pressure of separated blood plasma by a pressure control device (¶ [0115] and Fig. 2, sensors 96 controlling pressure);

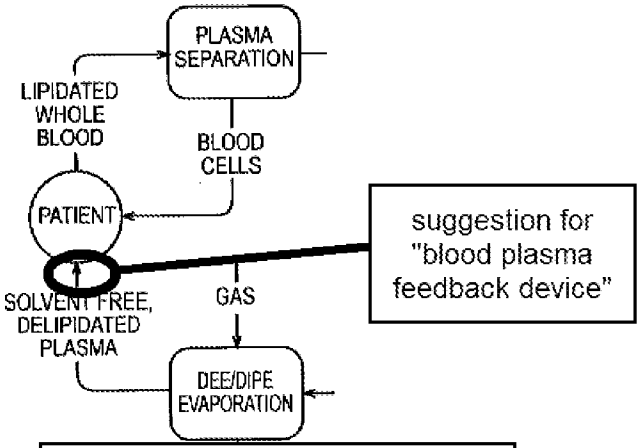
10. passing the separated blood plasma through the blood plasma lipids filtering device for filtering out lipids of the separated blood plasma (¶ [0059], [0101]-[0102], Figs. 2, 3, HFC / hollow fiber contactor 18 filtering lipids);

11. flushing a blood plasma lipids filtering device (¶ [0092], flushing HFC);

12. wherein the blood plasma lipids filtering device comprises multi-layers of thin film membranes (¶ [0101], [0119], Figs. 3, 9, HFC 18 comprising multiple hollow fibers 20), of which:

13. at least a first film is a membrane having filter aperture pores of about 0.3 to 0.65 microns and comprises a lipid absorptive material for filtering out lipids of the separated blood plasma (¶ [0101]-[0102] and Fig. 3, HFC 18 comprising hollow fibers 20 having pores 26 sized up to 300 nm, or 0.3 μm; overlapping claimed range of about 0.3 to 0.65 μm; hollow fibers are substantially lipid absorptive, as indicated by their ability to allow lipids to diffuse through pores 26);

14. feeding the filtered blood plasma back to the blood of the patient (Fig. 1, delipidated plasma returned to patient). While Bomberger '809 does not explicitly disclose a blood plasma feedback device, Bomberger '809 suggests connecting to a patient since the system returns delipidated plasma. See annotated Fig. 1.



Annotated Fig. 1 of Bomberger '809 et al. (US 20030150809)

15. However, Bomberger '809 fails to teach or fairly suggest alone or in combination the essential structures of the claimed device, such as at least one additional first film further interposed between the second and third films, and wherein the lipid absorptive material of the first film and the additional first film comprises silicon oxide pellets.

16. Bomberger '809 is entirely silent regarding silicon oxide pellets, and discloses only a first layer. Motivation is lacking to modify Bomberger '809 with an additional layer comprising silicon oxide pellets, since Bomberger '809 extracts lipids in HFC 18 with

solvents. For example, Bomberger '809 flows extraction fluid and plasma through HFC to remove lipids from plasma (¶ [0107]). Additionally, modifying the HFC fibers with silicon oxide pellets would require restraining or holding layers. That is, silicon oxide pellets are granular or loose, and require additional materials to hold them in place. Therefore Bomberger '809 lacks the claimed additional first film, along with a suggestion to modify.

17. The claimed silicon oxide pellets are critical since they filter lipids from separated blood plasma by absorbing lipids to filter media (specification p. 4, ¶ [0020], "pure physics affinity with the natural adsorption method"). That is, the claimed invention removes lipids from the blood without solvents, or chemical reactions, by passing plasma over silicon oxide pellets. Bomberger '809 instead requires solvents that extract lipids.

18. Similarly, Bomberger '776 et al. (US 20060000776) discloses a system and method for removing lipids from plasma (¶ [0002], [0022], [0073], Fig. 2, system 10) comprising:

19. collecting blood from a patient by a blood collecting device (¶ [0082], Fig. 2, blood stored in fluid stored 14 prior to treatment);

20. separated blood plasma that enters a pre-filtered blood plasma bag (¶ [0082], [0110], Fig. 2, fluid source 14 containing plasma); and

21. flushing a blood plasma lipids filtering device connected to the pressure control device with saline solution from a saline solution treatment bag connected to an outlet of

the pre-filtered blood plasma bag (¶ [0110], priming delipidation system 10 using a saline fluid stored within saline fluid source 21).

22. However, Bomberger '776 also lacks the claimed second layer. Examiner cited Bomberger '776 as teaching a step of flushing with saline (¶ [0110] saline preferable because it is isotonic with plasma). However, Bomberger '776 fails to remedy the critical deficiency of Bomberger '809, namely the first film and additional first film comprising silicon oxide pellets. Bomberger '776 instead discloses a filter membrane comprising at most a single layer (¶ [0076], HFC's 16 comprising hollow fibers 20 each formed by a membrane), and lacks a suggestion to modify this filter membrane with silicon oxide pellets. Additionally, Bomberger '776 removes lipids with solvent (¶ [0076], [0077]), similarly to Bomberger '809. The claimed system instead removes lipids with silicon oxide pellets.

23. Also cited in the last Office Action, Matkovich et al. (US 5252222) discloses a filter for treating parenteral fluids (col. 3, lines 16-19), comprising:

24. a second film membrane having filter aperture pores of about 0.3 microns (col. 8, lines 32-41 and col. 7, lines 54-58, prefilter in examples 3 and 5 having pore rating of about 2 mm which substantially approximates the claimed range of about 0.3 mm), and

25. a third film membrane having filter aperture pores of about 0.2 microns and comprising nylon as a base material (col. 8, lines 32-41, hydrophilic nylon membrane with pore rating of about 0.65 mm, which substantially approximates the claimed range of about 0.2 mm).

26. Here, Examiner cited Matkovich as teaching the claimed second and third films. However, Matkovich fails to remedy the deficiencies of Bomberger '809 and Bomberger '776 , namely the first film and additional first film comprising silicon oxide pellets. Additionally, Matkovich solves a different problem than the claimed second and third layers. Matkovich removes microbes from nutritional solution with the two layers (col. 1, lines 22-40), while the claimed invention filters bacteria and chyle-lipoprotein with a second layer and filters foreign particles with the third layer. Additionally, Matkovich teaches away from absorbing lipids, since the nutritional solutions contain emulsified lipids intended to bypass a filter (col. 1, lines 36-40).

27. Another reference of record, Papillon; Jean et al. (US 5348533) discloses a blood processing system (col. 1, lines 7-10, col. 3, lines 22-29), comprising:

28. a centrifuge (col. 3-4, lines 65-9, Fig. 1, centrifuge 40 having stationary part 12 and bowl 10),

29. an automatic weight/volume detection device for transmitting a signal that triggers a stop response to the blood separating device and the blood collecting device when the blood plasma bag is full (col. 4, lines 29-33, Fig. 1, digital weighed W2 providing signal to processor 20).

30. Examiner cited Papillon to remedy a deficiency of an automatic weight/volume detection device. However, Papillon entirely lacks a multi-layer filter, especially a multi-layer filter comprising a first film and additional first film comprising silicon oxide pellets. Papillon instead separates blood with a centrifuge, and fails to suggest any filter

element (col. 3, lines 44-47, system comprising blood component separator and no filtering devices).

31. Also cited in the previous Office Action, Cham (US 4895558) discloses a method and device for removing lipids from plasma (col. 1, lines 7-10), comprising:

32. collecting blood from a patient by a blood collecting device (col. 3, lines 31, 56-61, Fig. 6, drawing needle);

33. separating blood plasma from the collected blood by a blood separating device connected to the blood collecting device (col. 3, lines 32, 56-61, Fig. 6, disposable centrifugal separator);

34. a saline solution treatment bag (col. 8, lines 40-44 and Fig. 6, replacement fluid solution container), and

35. a waste saline solution bag (col. 8, lines 8-18 and Fig. 6, waste bag),

36. However, Cham does not teach the critical first film and additional first film comprising silicon oxide pellets. Also, Cham extracts lipids with solvent (col. 3, lines 33-35, 62-68, Fig. 6, plasma / solvent mixer / delipidation unit) similarly to Bomberger '809 and Bomberger ‘776. Therefore Cham does not contemplate filtering lipids from separated blood plasma with an absorbent filter.

37. Also of record, Foltz et al. (US 5401466) teaches a separation device for lipids (column 3, lines 27-34), comprising:

38. a lipid absorptive material comprising silicon oxide pellets (col. 6, lines 25-44, especially lines 32-36).

39. However, Folz does not teach an additional layer comprising silicon oxide pellets. to clarify, Folz teaches at most a single layer of silicon oxide pellets (Fig. 1, layer 1 of glass fiber and porous silica) and therefore fails to remedy the deficiencies of the above cited references. Additionally, Folz filters lipids for testing or diagnosis, not a high-volume hollow-fiber membrane (col. 3, lines 60-67). Therefore, the filters of Bomberger '809 and Folz are substantially incompatible, and one having ordinary skill in the art would not be motivated or enabled to modify the single-layer filter of Bomberger '809 with a silicon oxide pellet layer of Folz.

40. Not previously cited, Gorsuch; Reynolds G. F. et al. (US 5152743) discloses a system for reducing blood cholesterol (col. 1, lines 10-13, col. 3, lines 9-16, col. 4, lines 49-52, Fig. 1, apparatus 10), comprising:

41. collecting blood from a patient by a blood collecting device and separating blood plasma from the collected blood by a blood separating device connected to the blood collecting device (col. 4, lines 52-57, Fig. 1, plasma separation apparatus 10 removing plasma from vein 11); and

42. passing the separated blood plasma through a blood plasma lipids filtering device for filtering out lipids of the separated blood plasma (col. 4, lines 57-61, col. 7, lines 12-24, Fig. 1, cholesterol removal filter 13).

43. However, Gorsuch fails to teach or fairly suggest alone or in combination the critical silicon oxide layers. Instead, Gorsuch filters cholesterol with hollow fibers (col. 9, lines 34-56, filter fibers 38, 38' comprising polymer). Therefore Gorsuch fails to remedy the deficiencies of the above cited references.

44. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

45. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

46. Authorization for this examiner's amendment was given in a telephone interview with Thomas M. Hardman on Monday, 2 November 2009.

Conclusion

47. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Fissell, William H. IV et al. US 20040124147
- Atkin J. et al. US 4950224
- Atkin J. et al. US 5152743
- Gorsuch, Reynolds et al. US 20040050788

48. Any inquiry concerning this communication or earlier communications from the examiner should be directed to:

Adam Marcetich
Tel (571)272-2590
Fax 571-273-2590

49. The Examiner can normally be reached on 8:00am to 4:00pm Monday through Friday.

50. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

51. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Adam Marcetich/
Examiner, Art Unit 3761

/Leslie R. Deak/
Primary Examiner, Art Unit 3761
16 November 2009